



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,037	08/27/2003	Naoki Ueda	4041J-000760	5113
27572	7590	04/29/2005	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			FORD, JOHN K	
			ART UNIT	PAPER NUMBER
			3753	

DATE MAILED: 04/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

52

Office Action Summary

Application No.

10/649,037

Applicant(s)

UEDA, NAOKI

Examiner

John K. Ford

Art Unit

3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/5/05
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 4-7,9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,8,10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/17/03
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Applicant's election of Group I (heat exchangers of different materials) and the species of Figure 1, without traverse is acknowledged. Applicant has identified claims 1-3, 8 and 10 as being readable on the elected species. Claims 4-7 and 9 are withdrawn from consideration at this time.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 10 a fluid cannot be "equal to and above" a temperature at the same time.

Applicant probably meant, "equal to *or* above."

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 8 and 10 are rejected under 35 U.S.C. 102(e) or (b) as being anticipated by Ruppel USP 6,688,292 or Ruppel 2002/0011242, respectively.

Ruppel '292 and Ruppel '242 are believed to be identical with respect to their essential disclosure.

An internal fluid 2 flows through pre-cooler 3 and then through heat exchanger 1' (comprised of heat exchangers 4 and 5). The pre-cooler is made of a more erosion-resistant and temperature-stable material (e.g. copper-zinc alloy) than the heat exchanger 1' (e.g. aluminum). See col. 2, lines 42-46 and col. 4, lines 39-45 of the '292 patent and paragraph 26 of the '242 publication, incorporated here by reference.

Regarding claims 8 and 10, the intended fluids and intended temperatures of operation do not import any structural limitation into apparatus claims and are not given weight in a claim directed to the apparatus itself. See MPEP 2114, incorporated here by reference.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of EP 0,522,288 and Ruppel et al (6,688,292)

EP '288 has been translated here and that translation is incorporated here by reference. No materials of construction for high temperature intercooler 4 and low temperature intercooler 3 are disclosed in EP '288. To have made intercooler 4 of a more heat resistant alloy (e.g. a copper zinc alloy) and intercooler 3 of conventional aluminum would have been obvious in view of the teaching of Ruppel with regard to the construction of the pre-cooler (3) and the heat exchanger (4 and 5) of Ruppel.


Any inquiry concerning this communication should be directed to John Ford at telephone number (571) 272-4911.

Application/Control Number: 10/649,037
Art Unit: 3753

Page 4

Ford/PJ

4/25/05



John K. Ford
Primary Examiner